Amendments the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-123. (canceled)

124. (currently amended) A conjugate consisting essentially of an antibody fragment covalently modified by one or two nonproteinaceous polymer molecules at a free sulfhydryl group of a cysteine residue within the hinge region of the antibody fragment, wherein a disulfide bridge within the hinge region is avoided by substituting another amino acid for the corresponding cysteine residue within the hinge region in the opposite chain of said antibody fragment, and wherein (a) the apparent molecular weight of the conjugate, as determined by size exclusion chromatography, is at least about 500 kD, (b) the average actual molecular weight of each nonproteinaceous polymer molecule is at least 20 kD, and (c) the conjugate has an apparent size that is at least about 8-fold greater than the apparent size of the parental antibody fragment.

125. (previously presented) The conjugate of claim 124 wherein the nonproteinaceous polymer molecule is polyethylene glycol (PEG).

126. (previously presented) The conjugate of claim 125 wherein the antibody fragment is selected from the group consisting of Fab', Fab'-SH, and $F(ab')_2$.

127. (previously presented) The conjugate of claim 125 wherein the antibody fragment is selected from the group consisting of Fab' and Fab'-SH modified by one PEG molecule.

128. (previously presented) The conjugate of claim 127 wherein the PEG molecule has an average molecular weight of at least 30 kD.

129. (previously presented) The conjugate of claim 124 wherein the apparent molecular weight of the conjugate is at least about 800 kD.

130. (previously presented) The conjugate of claim 124 wherein the apparent molecular weight of the conjugate is at least about 1,800 kD.

131. (previously presented) The conjugate of claim 124 comprising the antigen binding site of HER2.

132. (presently presented) The conjugate of claim 124 comprising the antigen binding site of CD20.

133. (currently amended) A conjugate consisting essentially of an antibody fragment covalently modified by two nonproteinaceous polymer molecules at a free sulfhydryl group of a cysteine residue within the hinge region of the antibody fragment, wherein a disulfide bridge within the hinge region is avoided by substituting another amino acid for the corresponding cysteine residue within the hinge region in the opposite chain of said antibody fragment, and wherein (a) the apparent molecular weight of the conjugate, as determined by size exclusion chromatography, is at least about 500 kD, (b) the average actual molecular weight of each nonproteinaceous polymer molecule is at least 20 kD, and (c) the conjugate has an apparent size that is at least about 8-fold greater than the apparent size of the parental antibody fragment.

134. (new) The conjugate of claim 125 comprising the antigen binding site of HER2.

135. (new) The conjugate of claim 125 comprising the antigen binding site of CD20.

136. (new) The conjugate of claim 126 comprising the antigen binding site of HER2.

137. (new) The conjugate of claim 126 comprising the antigen binding site of CD20.

138. (new) The conjugate of claim 127 comprising the antigen binding site of HER2.

139. (new) The conjugate of claim 127 comprising the antigen binding site of CD20.

140. (new) The conjugate of claim 128 comprising the antigen binding site of HER2.

141. (new) The conjugate of claim 128 comprising the antigen binding site of CD20.

142. (new) The conjugate of claim 129 comprising the antigen binding site of HER2.

143. (new) The conjugate of claim 129 comprising the antigen binding site of CD20.

144. (new) The conjugate of claim 130 comprising the antigen binding site of HER2.

145. (new) The conjugate of claim 130 comprising the antigen binding site of CD20.